FOREWORDS

DAN MCCLURE
Chair, HIF Board

The best journeys are unexpected affairs. There are moments when it seems as if you’ve nearly reached your destination, only to turn a corner and see the road stretched out ahead across a landscape breathtaking in its possibilities. I believe we, as innovators, and particularly humanitarian innovators, have come to one of these corners.

The HIF helped pioneer efforts to break free of traditional risk adversity by fostering innovators who wanted to pursue radical new approaches to solving humanitarian problems but were previously unable to find appropriate funding and support. There’s a lot to be proud of in this legacy, but as we turn the corner on the journey to further develop innovation capabilities in the humanitarian sector, we see how much more there is to do.

We’ve learned important things reaching this point. We’ve learned that many important problems don’t come clearly framed and ready for action; that community engagement can and should be more than ‘consulting’ with the people who are most intimately affected by the changes innovation brings; and that even great ideas don’t automatically scale, which means some of the most difficult work occurs after a successful pilot.

Last summer, the HIF conducted a ground up external review and reimagining of its strategic direction, with a new generation of complex, messy challenges front and centre. While not abandoning the key role the HIF has played in providing well considered grant funding for a broad range of ideas, the key themes of the new strategic approach embrace even more challenging problem spaces.

The intent is to work with complex system based innovators, wrestle even more aggressively with the challenge of scale, and to test ways to genuinely embrace the participation revolution. As these efforts grow, there will be a need to pioneer diverse partnerships and help build an even more sophisticated innovation ecosystem. Review the following pages and it will be clear this work has already begun. It will be exciting to see how this highly energised team can do in the year ahead.

JESS CAMBURN
Director, Elrha

As an organisation, we believe creativity, exploration and informed risk-taking are essential to bring about change. It’s this belief that propels us to undertake a continuous cycle of renewal – learning from our past experiences, seeking out new routes forward, and ultimately looking for ways to deliver more ambitious change.

In 2017 the HIF engaged its first external evaluation reviewing its work since its launch in 2011. We are proud the evaluation affirms our effectiveness in supporting innovation through grant-making, and that it recognises our influential learning and advocacy work in this still-nascent field. We have built on the findings of this review to develop our new strategic direction for 2018-2020. We’re excited to launch this ambitious new period for the HIF which promises to capitalise on our unique track record in order to tackle more complex innovation problems.

Across Elrha, we are also embracing renewal. In 2018 Elrha will transition to a subsidiary organisation of Save the Children UK, becoming a legal entity in its own right. Since 2009, Elrha has followed a strong growth trajectory, the organisation’s work fills a critical need for research, evidence and innovation within the humanitarian system. With a rapidly growing programme of work and an increasing team, the transition will enable Elrha to secure future growth and achieve even greater impact in the years to come.

Throughout all this exciting change, I’d like to thank the members of our HIF Board, our thematic advisers, and our Funding Committee for their strategic guidance, technical input and tireless support. Our lean structure means we depend on our extended network to ensure robust decision making and the delivery of our ambitious goals. This support is especially important in times of change, and we’re very grateful for their dedication.

In particular, I’d like to thank Ben Ramalingam, who stood down as Chair of the Board in 2017. Ben was instrumental in establishing the HIF and has provided strong and insightful leadership over the last seven years. I’d also like to welcome Dan McClure, who takes over as Chair. Dan is Innovation Design Lead at Thoughtworks and has been active member of the HIF Board for many years. He has already helped to lead the development of our new strategic approach and we are delighted to have him step into the role.

Elrha’s Humanitarian Innovation Fund (HIF) supports organisations and individuals to identify, nurture, and share innovative and scalable solutions to the challenges facing effective humanitarian assistance. We seek to stimulate humanitarian innovation practice in three main ways:

- Providing funding and advisory support for innovations at different stages of their evolution, and developing challenge-led initiatives to direct innovation in strategic areas of concern.
- Capturing and sharing lessons learned in order to improve the research and evidence base for innovation, and the humanitarian system’s ability to innovate.
- Building and supporting partnerships between humanitarian agencies, universities, private sector organisations, governments and affected populations.

Copy written and edited by Elrha and HIF programme team members:
Beth Deveron, Claire Davidchet, Mark Griffiths, Cecilee Hestbaek, Ian McClelland, Nora Oliesleg, Liz Rawlins, and Anna Skeels.


Designed by Ross Redman
A YEAR OF LEARNING AND MOVING FORWARD

ANNA SKEELS – HIF Programme Manager

Elrha is a learning organisation. At the core of our values is a commitment to the generation, accessibility and use of robust evidence to achieve the greatest possible change. With such a remit, there is no room for complacency or habitual practice, there is no time to stand still. This year has been no exception.

As a programme within Elrha, the Humanitarian Innovation Fund (HIF) has actively contributed to evidence generation, thought leadership and advocacy for learning on innovation in the humanitarian sector. We have created new multi-layered innovation challenges in water, sanitation and hygiene (WASH), coordinated learning activity in gender-based violence (GBV), led on generating new learning from our work on scale, and established new partnerships to help us get closer to, and learn from, the communities we aim to serve. We have also begun work in earnest on our humanitarian innovation ‘field guide’, an evidence-based resource that will capture what works in the sector.

As part of our WASH initiative, with support from our WASH Technical Working Group, we have launched two major challenges on User-Centred Sanitation Design through Rapid Community Engagement and Developing and Disseminating Guidance on Faecal Sludge Disposal Sites in Emergencies. Both of these challenges have research and dissemination as a core concern, with specific partners taking these roles from the outset. In 2018, a planned research exercise will compile and share learning on the most impactful WASH solutions we’ve funded.

Through our GBV initiative, we have launched a new challenge and funded three promising solutions to enhance the monitoring and evaluation of GBV in emergencies. With the support of our GBV Advisory Board, and building on our 2016 Gap Analysis, this challenge was launched in early 2017 with more than 70 teams putting forward their ideas. At the global level, we are liaising with two key coordinating bodies – the GBV Call to Action and GBV Area of Responsibility – so we can better collaborate on innovation in GBV programming and pursue a coordinated learning agenda.

Our Accelerating the Journey to Scale initiative, is tackling one of the most critical challenges facing the humanitarian innovation community. With a plethora of successful early-stage innovations but very few that have gone to scale, we urgently need to learn more about the dynamics involved in growing a good idea. This year, through close mentoring of our scale grantees, tracking progress through our newly-designed ‘Scale Assessment Framework’ and the recruitment of a learning partner to review our work and compile lessons learned, we are beginning to build a body of evidence on scale.

The onus is now on the HIF to learn from and act on the Evaluation’s recommendations, and part of this important work has already begun. A new strategic direction for the HIF is being developed, building on these recommendations and our work to date, as well as responding to a new generation of innovation challenges. This involves tackling more complex problems, increased strategic collaboration, deeper local and operational engagement and a systems-based approach. It also involves a responsible form of ambition, one that is creative and dynamic, but evidence-based and grounded in accountability and sensitivity to the humanitarian ecosystem of which we are a part.
HOW WE SUPPORT INNOVATION

THE HIP PROVIDES FUNDING AND INNOVATION MANAGEMENT SUPPORT ACROSS FOUR INITIATIVES:

**CORE GRANTS**

Supported by the UK Government (Department for International Development – DFID), the Swedish International Development Cooperation Agency (Sida), and the European Civil Protection and Humanitarian Aid Operations Department (ECHO).

Based on our five-stage model of the innovation process, our core grants support innovative ideas across the humanitarian sector, with three funding streams for early-stage innovation, development and implementation, and diffusion.

> See page 07

**WATER, SANITATION AND HYGIENE (WASH)**

Supported by the UK Government (Department for International Development – DFID).

Limited access to clean water and poor sanitation are critical drivers for the spread of diarrhoeal diseases, constituting a major challenge during periods of crisis. This initiative aims to combine creative problem-solving with rigorous testing and evidence-building to improve WASH interventions.

> See page 15

**GENDER-BASED VIOLENCE (GBV)**

Supported by the Swedish International Development Cooperation Agency (Sida).

Gender-based violence in humanitarian settings is a life-threatening issue that undermines dignity and causes immense suffering. This initiative aims to create and stimulate innovative approaches to tackling GBV.

> See page 13

**ACCELERATING THE JOURNEY TO SCALE**

Funded by the Netherlands Ministry of Foreign Affairs (MFA) with support from the UK Government (Department for International Development – DFID).

Through this initiative we are seeking to better understand and support the process of scaling innovations which have the potential to bring about transformational change in the humanitarian system, and help millions of people across the globe who are affected by crises each year.

> See page 23

WHERE WE WORK

PROJECTS FUNDED SEPT 2016-2017:

- CORE
- GBV
- WASH
- JOURNEY TO SCALE

PROJECTS FUNDED 2011-2016

See page 23
Getting Emergency Alerts to Small and Isolated Communities

**WHAT IS THE HUMANITARIAN NEED?**
Cellular or internet services are vital for early warning systems and providing information in difficult or evolving situations, such as refugee camps. But in many isolated communities, cellular or internet services may be absent, and in emergencies, services can be overwhelmed.

**WHAT IS THE INNOVATIVE SOLUTION?**
The Serval Project combines ‘Serval Mesh’ – an off-grid mobile communications system – with an innovative satellite broadcast service, to create the world’s first system to provide affordable and scalable emergency alerts and information dissemination for communities living beyond the edge of a reliable cellular service.

**WHAT ARE THE EXPECTED OUTCOMES?**
By the end of this project, Flinders University expect to create a functioning proof-of-concept system that can receive emergency alerts and related information via the Outernet satellite broadcast service, and distribute that information among a remote community via the Serval Mesh off-grid mobile communications system.

**CORE GRANTS AWARDED IN 2016–2017**
**EARLY-STAGE INNOVATION**
Projects funded by our Early Stage Innovation (ESI) grants are in the ‘Recognition’ and/or ‘Invention’ stages of the innovation process – seeking to improve understanding of a specific problem, challenge or opportunity, and looking to build on that understanding in order to invent a novel idea or adapt an existing idea that addresses a recognised issue.

Getting Emergency Alerts to Small and Isolated Communities

**WHAT IS THE HUMANITARIAN NEED?**
Literature on the use of mobile technology for migration mostly focuses on migration into Europe, with refugees from the Middle East relying on tools such as Facebook and Google Maps to support their journeys. But there has been little research conducted on the technology used and needs of refugees traveling within East Africa.

**WHAT IS THE INNOVATIVE SOLUTION?**
Samuel Hall and Refunite are conducting a study to explore the challenges faced by refugees within East Africa, such as incomplete mobile connectivity, lack of access to smartphones, and low levels of technical literacy, as well as opportunities for using mobile technology to improve support services and the flow of information.

**WHAT ARE THE EXPECTED OUTCOMES?**
Through a research report and policy brief, this study will provide a better understanding of how mobile technology impacts refugees in East Africa, and how it can be used to deliver practical support. The study will also inform the development of a tool to evaluate the technology needs of refugees, and the impact of applications and services.

Innovating Mobile Solutions for Refugees in East Africa

**WHAT IS THE HUMANITARIAN NEED?**
Refugees in East Africa are in urgent need of scalable and reliable mobile communications for migration mostly into Europe, with refugees from the Middle East relying on tools such as Facebook and Google Maps, with a significant number in Middle East facing destruction.

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Community-Based Safeguarding of Heritage

**WHAT IS THE HUMANITARIAN NEED?**
Cultural heritage is increasingly threatened by conflict and environmental factors. The ways in which communities connect with their heritage can affect preservation, and stewardship can be an important instrument in creating jobs through tourism, and building communities that are stable and resilient.

**WHAT IS THE INNOVATIVE SOLUTION?**
Building on advances in consumer UAVs, photogrammetry and augmented reality, LSN and its partners aim to re-imagine how communities can be empowered to act as stewards of heritage sites facing destruction through conflict, encroachment or natural hazards.

**WHAT ARE THE EXPECTED OUTCOMES?**
The project ultimately aims to enable communities to model and monitor heritage sites, and to use and share the data. This grant will enable LSN and its partners to carry out proof-of-concept research, and to develop proposals for a pilot project that can demonstrate local ownership, potential for replication, and a sustainable business model.

Simulation-Based Training Tools for ‘Just-in-Time’ Capacity Building

**WHAT IS THE HUMANITARIAN NEED?**
This project aims to address three challenges in emergencies: how to enable local people to help themselves with less reliance on international support; how to empower frontline health workers; and how to improve the quality, speed, scale and coherence of local capacity building.

**WHAT IS THE INNOVATIVE SOLUTION?**
MiHealth are using a combinatorial approach – building on advances in pedagogy from vocational training, broadband and smart phone communications, simulated reality and gamification – to develop tools for simulation-based ‘just-in-time’ training, both for frontline health workers and to strengthen the healthcare capacity of local communities generally.

**WHAT ARE THE EXPECTED OUTCOMES?**
This project will advocate for alternatives to the current focus on ‘Massive Online Open Courses’ (MOOCs) with a well-defined, practical model for training in local languages, and using analytics to drive a virtuous circle of improvement.
Recognition of the Need for Innovative Psychosocial Programming in Collaboration with Vocational Training for Adolescents in Ugandan Refugee Camps

**What is the Humanitarian Need?**
The experience of psychological trauma from a humanitarian crisis can greatly impact an adolescent’s life, with significant short-term and long-term effects. While solutions such as therapeutic arts, peer support and cognitive behavioural therapy have been found to be successful, mental health clinicians are scarce in humanitarian settings and mental health services often carry stigma.

**What is the Innovative Solution?**
Playing to Live aim to develop a community-based mental health programme for adolescent girls in Ugandan refugee settlements, based on current data from the settlements, a review of best practices, focus group discussions and stakeholder interviews with the refugee community themselves.

**What are the Expected Outcomes?**
This project will produce a literature review that highlights best practice in mental health programming for refugee and emergency settings, as well as an in-depth needs and resource assessment specific to community-based mental health programming in Uganda’s refugee settlements.

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Innovative Impact Assessment in Humanitarian Training

**What is the Humanitarian Need?**
Evaluation of capacity building interventions is an ongoing challenge for humanitarian training providers. Beyond whether participants find training useful, engaging and relevant, the degree to which they acquire knowledge and skills, apply that learning in their jobs, and go on to achieve targeted outcomes, is largely unknown.

**What is the Innovative Solution?**
RedR and the University of Sussex are prototyping methods to better understand participants’ changes in behaviour following capacity building interventions. Three methodologies will be designed and tested: role play to compare knowledge and skills before and after training; reflective practices using diaries and coaching; and ongoing engagement with participants to develop case studies.

**What are the Expected Outcomes?**
Prototypes of each methodology will be produced, tested and refined based on user feedback. It is hoped that the project will make improvements in learning, behaviour change and target outcomes more likely, as methodologies which promote these changes are identified and increased in programme design.

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Lead User Innovation in Flood Resilience

**What is the Humanitarian Need?**
Floods affect more people globally than any other type of natural hazard and cause some of the largest humanitarian losses. Many affected communities are addressing the impact of floods through their own ingenuity and means, but lack the support to scale and more widely disseminate their ideas and approaches.

**What is the Innovative Solution?**
IFRC and its partners are adapting the ‘lead user’ approach – a proven market research methodology – to the humanitarian sector, and applying it to help find innovative solutions to reduce the impact of floods that have been developed by affected communities themselves.

**What are the Expected Outcomes?**
First, IFRC aim to confirm whether or not the ‘lead user’ approach method is applicable to humanitarian settings. If the approach is successful, they hope to identify local innovators with potential solutions that can be given further support through funding, partnerships and the dissemination of their ideas.

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PREP1: A Social Media Analysis Tool for Preparedness

**What is the Humanitarian Need?**
Social media analytics tools (SMAT) offer humanitarian agencies a big opportunity to gather insights from affected communities and to connect with them and other humanitarian actors to improve emergency preparedness. But an analysis conducted with Red Cross Red Crescent societies found that common barriers to use include affordability, functionality and user skills.

**What is the Innovative Solution?**
Trilateral Research are collaborating with the Global Disaster Preparedness Center to collect and validate user requirements for designing and developing a social media analysis tool for disaster preparedness – PREP1. This will be accomplished through interviews and a workshop with Red Cross Red Crescent actors from around the world.

**What are the Expected Outcomes?**
The primary output of the study will be a report revealing the user requirements and an initial design of PREP1, validated by end users. In the long term, it is hoped that PREP1 will enhance the efficiency and effectiveness of humanitarian actors’ engagement with local communities and other actors on disaster preparedness initiatives.
**WHAT IS THE HUMANITARIAN NEED?**

To save lives and alleviate suffering, humanitarian and development agencies need systems and tools to access the best technical expertise urgently. But without common tools, access to information is often fragmented both within and between agencies limiting effectiveness.

**WHAT IS THE INNOVATIVE SOLUTION?**

KnowledgePoint is an online Q&A forum offering free and fast expert advice to aid workers in the field. Anyone can post questions and a network of 150+ technical experts aim to respond within 48 hours. Since its launch in 2012, KnowledgePoint has gained more than 105,000 users in 183 countries, with India, Nigeria, Kenya, the UK and the US accessing the site most.

**WHAT ARE THE EXPECTED OUTCOMES?**

Having previously received an ESI grant to develop the platform, this Diffusion grant aims to help review and upgrade infrastructure; improve user experience on mobile devices; explore gamification to increase engagement; produce in-depth content on key technical topics; and increase visibility of the service across the sector.

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**Responsive Listening Through Improved Feedback Mechanisms**

**LEAD ORGANISATION:** Oxfam GB

**LOCATION:** Lebanon; Jordan; Iraq; Yemen; Syria

**GRANT VALUE:** £149,800

*WHAT IS THE HUMANITARIAN NEED?*

There are few systems in place that help staff coordinate with partners to collect, manage and respond to feedback received from communities affected by crises – particularly informal feedback received in person. This prevents actors from learning what they are doing well and identifying problems.

*WHAT IS THE INNOVATIVE SOLUTION?*

Following an exploratory ESI grant, Oxfam GB is introducing a mobile case management tool with local and global partners across their Middle East humanitarian response to capture, analyse and respond to feedback data, and to give those affected a voice in improving the support and services provided.

*WHAT ARE THE EXPECTED OUTCOMES?*

This innovation will enable feedback on service delivery to be accessed from a database while the project is still ongoing, so staff are more informed, able to take swift action when required, and can use evidence gathered to influence programming and resource allocation.

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**KnowledgePoint: Crowdsourcing Humanitarian Expertise**

**LEAD ORGANISATION:** RedR UK

**PARTNERS:** WaterAid; International Rescue Committee; Practical Action

**LOCATION:** UK

**GRANT VALUE:** £47,307

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**Development and Implementation Phase**

Projects funded by our Development and Implementation Phase (DIP) grants are seeking to develop an innovation by creating practical, actionable plans and guidelines, implement an innovation to produce real examples of change, and/or test the innovation to see how it compares with existing solutions.

**Diffusion**

Projects in the Diffusion stage of the innovation process are looking to encourage uptake and wider adoption of successful innovations, diffusing ideas and starting their journey to scale.

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WANT TO KNOW MORE ABOUT OUR CORE GRANTS PROJECTS?

Get in touch with Mambwe Chella – m.chella@elrha.org
Gender-based violence (GBV) is a life-threatening concern. It undermines dignity, causes immense physical and mental distress, and threatens safety, equality and development around the world. 

Women and girls in humanitarian crises are particularly vulnerable to GBV. During conflict and natural disasters, existing social support and violence prevention mechanisms often break down, making the risk of GBV particularly acute. To save lives, humanitarian organisations need to understand, prevent and respond to gender-based violence in humanitarian crises.

Innovation has an important part to play in addressing the complexity of violence against women and girls. Attempting to approach this complexity from a new perspective can, however, seem like a daunting process. First, GBV is often affected by systemic, political and cultural drivers, which are difficult for individual organisations and donors to influence. Second, it is an under-resourced field, which rightly calls for intensified and sustained efforts to not ‘reinvent the wheel’ and to weigh up each funding allocation. Third, its terminology is often contentious, making it important to establish consensus on definitions and positions on certain topics.

To better understand these issues and ensure an informed and coordinated approach, we are working closely with our GBV Advisory Board and humanitarian GBV coordination mechanisms at the global level, such as the Gender-Based Violence Area of Responsibility (GBV AoR) and the Call to Action on Protection from Gender-Based Violence in Emergencies (Call to Action). By coordinating with the wider sector in this way, we can ensure that we’re addressing the most pressing challenges, selecting the most promising innovations and ensuring the best chances of uptake and scale.

In late 2016 we launched the first ever GBV Gap Analysis report, providing in-depth insights into the most needed and viable fields for innovation in humanitarian GBV programming. The report identifies four specific innovation challenge areas. Our first challenge was launched in early 2017 with a call for innovators to develop new solutions to improve monitoring and evaluation in humanitarian GBV programming.

In May 2017 three promising projects were selected and awarded grants of up to £50,000 each to ensure that we’re addressing the most pressing challenges, selecting the most promising innovations and ensuring the best chances of uptake and scale. 

CHALLENGE WINNER:

**Using Small Sample Size Surveys in GBV Programmes**

**LEAD ORGANISATION:**
Global Women’s Institute, George Washington University

**PARTNERS:**
Institut de Formation du Sud

**LOCATION:**
Haiti

**GRANT VALUE:**
£48,482

Traditional cluster surveys used to estimate rates of GBV and measure the impact of GBV programmes might involve sampling thousands of households – a near-impossibility in humanitarian settings. This project is piloting the use of Lot Quality Assurance Sampling (LQAS) – a methodology which uses smaller sample sizes – to measure GBV indicators in humanitarian settings. Data from a survey using the LQAS methodology in Haiti, will be compared to data previously collected using a traditional cluster-based approach.

CHALLENGE WINNER:

**Raising the Bar for Routine M&E in GBV Programmes**

**LEAD ORGANISATION:**
International Rescue Committee

**LOCATION:**
Jordan; Kenya

**GRANT VALUE:**
£49,998

There are very few reliable ways to measure outcomes for GBV survivors – and therefore the impact of GBV programmes – which limits the ability to adapt and improve GBV interventions. This project aims to develop and pilot innovative tools to reliably measure change in GBV survivors’ felt stigma and psychosocial wellbeing. The end goal is a set of measurement tools that have been validated among two different refugee populations, accompanied by guidelines for adaptation to other humanitarian and development contexts.

CHALLENGE WINNER:

**SenseMaker® for Monitoring and Evaluation of SGBV Programmes**

**LEAD ORGANISATION:**
Queens University

**PARTNERS:**
ABAAD; UNFPA; International Rescue Committee

**LOCATION:**
Lebanon

**GRANT VALUE:**
£49,958

M&E for sexual and gender-based violence (SGBV) programming frequently relies on output measures such as number of beneficiaries receiving services, but there is little evidence to support assumptions that individuals benefit from receiving services. SenseMaker® asks individuals to anonymously share stories about their experience of a service, and this data can then be analysed to find emergent patterns and generate new insights, which can in turn inform better decision making and adaptive delivery of SGBV programmes.

WANT TO KNOW MORE ABOUT OUR GBV INITIATIVE AND FUNDED PROJECTS?
Get in touch with Claire Dusonchet – c.dusonchet@elrha.org
WATER, SANITATION AND HYGIENE

CECILIE HESTBAEK – Innovation Management Adviser

HOW CAN WE BEST SOLVE WASH PROBLEMS?

Safe water, sanitation and hygiene (WASH) is fundamental for humanitarian outcomes. Without it, children die of diarrhoea and respiratory diseases, women and girls are prevented from going to school or taking part in livelihood or social activities, and cholera epidemics spread. But WASH is also one of the humanitarian sectors where we have the least systematic evidence. This means that many of the problems identified in our WASH Gap Analysis are best addressed through rigorous, exploratory research – the ‘Recognition’ stage of the innovation process. This year, we have funded such research in surface water drainage and management in refugee camps difficult, disrupting the provision of essential water and sanitation services. WASH is also one of the humanitarian sectors where we have the least systematic evidence. This means that many of the problems identified in our WASH Gap Analysis are best addressed through rigorous, exploratory research – the ‘Recognition’ stage of the innovation process. This year, we have funded such research in surface water drainage and management in refugee camps difficult, disrupting the provision of essential water and sanitation services.

NEW INNOVATIONS IN WASH

If we don’t have sufficient research underpinning our understanding of the problem, should experimental solutions be put on hold? Not always. While funding a major field-testing study of existing water filters in emergency settings, we are also supporting three projects to develop better and cheaper water filters – Basic Water Needs, MSR Global Health and Faircap (the latter awarded in 2015–2016). To improve outcomes, evidence and experimentation need to go hand in hand.

Other exciting new product innovations we’ve funded include two alternatives to soap resulting from our 2016 Handwashing challenge (Acción contra el Hambre and Real Relief), a new technology for treating faecal sludge safely (Aerosan), and a sensor for monitoring water supplies in refugee camps (BRCK).

EMERGENCY HOUSEHOLD WATER FILTERS

It is vital that emergency-affected populations can access safe drinking water to prevent the spread of diseases like cholera and diarrhoea, but supplies are often disrupted and few household water filters have been developed specifically for humanitarian settings. In this challenge we were looking for early-stage household water filters or adaptations of existing filters that consider usability, durability, transportability and cost as crucial aspects of design, alongside pathogens filtering capacity. We also selected a research partner to test and evidence the usability and performance of existing household water filters across humanitarian emergency contexts.

Putting Emergency Household Water Filters To The Test

There is a notable lack of evidence on the performance of household water filters in humanitarian crises; lab tests or field tests in development contexts can offer some guidance, but rarely resemble the realities of an emergency. This project is looking specifically at efficacy of five filters in the field versus in the lab, and exploring user acceptability of the different filter models. The five filters are GrifAid, Black Berkey, ImerPure, Tulip Siphon, and Village Bucket. Results are expected in Spring 2018, and a final report will be published in late 2018.

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In a humanitarian crisis, handwashing with soap has proven to be one of the most critical and effective interventions to reduce infectious diseases causing death. But soap and water are often in short supply due to environmental, logistical or financial constraints. Communally-available soap bars are also prone to theft or can be misplaced, and are often used for dishes and laundry rather than handwashing. In this challenge, we explored contextually and culturally appropriate alternatives to soap.

**Moringa Oleifera**

Moringa Oleifera is a widely cultivated species of tree which lab studies have shown to have anti-septic and detergent properties. Experiments using powdered leaves have demonstrated potential for its use as a handwashing product in contexts where water and soap are unavailable and Moringa can grow. This study aims to provide evidence of the efficacy of different Moringa products in reducing bacteria on dirty hands; confirm the acceptability, desirability and feasibility of using Moringa products among potential users; assess viability by studying the market and value chain; and design a business model for implementation.

**Magic Towel**

Magic Towel is a lightweight, durable, antimicrobial fabric, which can be used for handwashing as substitute for soap and running water. This project aims to establish proof-of-concept in laboratory tests, with further field tests to examine user-acceptance and required behaviour change communication. Laboratory testing will establish proof that Magic Towel can provide users with clean hands without using soap and with a very limited water usage. Field testing will examine user acceptance and develop behaviour change communication to support uptake and use of the product.
Measuring the Effectiveness and Efficiency of Desiccation as a Method for Faecal Sludge Volume Reduction in High Density Environments

**WHAT IS THE HUMANITARIAN NEED?**
Diseases caused by poor sanitation can account for up to 50% of all deaths in an emergency. Emergency responders often rely on pit latrines, but these fill up quickly resulting in the need for regular replacement and emptying, which is difficult, dangerous and costly.

**WHAT IS THE INNOVATIVE SOLUTION?**
As faeces is at least 75% water there are substantial cost savings (in addition to other benefits) to be made by eliminating the water content. This project seeks to use enhanced passive ventilation to eliminate water content, therefore offering significant reductions in the frequency of desludging, the risks involved, and the associated costs.

**WHAT ARE THE EXPECTED OUTCOMES?**
Research by Université Laval and Swansea University will determine the optimal latrine design parameters for enhanced passive ventilation to increase volume reduction through evaporation, leading to the re-design of Aerosan’s toilet and improvements in the safety of handling waste.

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Realtime Monitoring and Reporting of Water in Refugee Camps

**WHAT IS THE HUMANITARIAN NEED?**
Access to clean water is a human right, but in many refugee camps worldwide it is a scarce resource. Ensuring this resource is delivered to those that need it the most is a difficult challenge, which can sometimes be politically charged or subject to corruption. Furthermore, access to information on water availability and delivery is often limited.

**WHAT IS THE INNOVATIVE SOLUTION?**
BRCK is utilising Internet of Things (IoT) technology to develop PicoBRCK – a low cost, reliable sensor that can monitor real-time water distribution and quality in refugee camps, ensuring clean water is delivered where it is needed most.

**WHAT ARE THE EXPECTED OUTCOMES?**
As a primary outcome BRCK will produce a map of sensor locations showing real water flow and real water quality, indicating if water being diverted away from core activities. This map will inform agencies about the delivery of water, with an expected outcome of faster response rates and higher availability of water among recipients.

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LISTENING TO THE WASH USER

**CHALLENGE:** USER-CENTRED SANITATION DESIGN THROUGH RAPID COMMUNITY ENGAGEMENT

The provision of appropriate sanitation facilities in humanitarian emergencies is vital for minimising health risks and preserving people’s privacy, safety and dignity. But because of limited time and resources, the design, selection and implementation of sanitation facilities is often done without adequate community consultation. This can result in unsuitable facilities and increased risks.

Using community engagement to help decision-making in emergencies is not new, but examples are isolated and there is little evidence of the effectiveness and overall impact of such approaches. With an overarching research project, the aim of this challenge is to create good practice guidance for rapid engagement with affected communities, generating actionable and practical solutions for user-centred sanitation in emergencies.

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**RESEARCH PROJECT:**
Community Engagement in Sanitation: Creating an M&E Framework for Emergencies

Oxfam GB, supported by the London School of Hygiene and Tropical Medicine, will conduct a review of existing community engagement practice and relevant approaches that could be applied in rapid-onset emergencies. They will then carry out an independent evaluation of the effectiveness of five community engagement pilots, exploring success factors for community engagement in the implementation of sanitation facilities in rapid-onset emergencies. This learning will be used to develop good practice guidance on how to carry out and evaluate rapid community engagement projects in emergency sanitation.
FROM INNOVATION TO IMPACT

The HIF has now funded over 40 WASH projects and has a varied portfolio of research and innovation. Some of our funded insights or solutions are being widely disseminated, but many are struggling to ‘break through’ and gain traction in the wider humanitarian sector. This is why we are now focussing even more on uptake.

In our recent challenge on Developing Guidance for Faecal Sludge Disposal Sites in Emergencies, we did things a bit differently. Instead of expecting the partner generating the insights to also communicate them, we funded a specialist partner to solely focus on dissemination and – long-term – the uptake of the insights generated. We hope this will not only ensure wide application of the research findings, but also yield insights into how front-line sanitation practitioners make decisions – and how these decisions can most effectively be influenced.

Research and innovation are only impactful if used, and as an innovation funder, this is a key success factor against which we measure ourselves.

Developing and Disseminating Guidance on Faecal Sludge Disposal Sites in Emergencies

The 2015 WASH Gap Analysis highlighted a significant knowledge gap in relation to the best methods for managing the disposal of faecal sludge during the first six months of rapid onset emergencies. Among possible factors accounting for this were lack of awareness among practitioners of existing faecal sludge disposal guidelines and existing guidelines not being user-friendly.

This research by BORDA aims to improve understanding of the driving forces behind the decisions made on faecal sludge disposal in rapid onset emergencies, and to identify and review all emerging and proven technical solutions. BORDA will then work with Solidarites International to transform the resulting content into a relevant and engaging format, employing a user-centred design approach to co-create the guidelines with WASH practitioners and expert advisers. Lastly, Solidarites International will develop and execute a dissemination and uptake plan in order to bring about change in faecal sludge disposal practice at field level.

CHALLENGE WINNER:

User-centred Engagement for Child-Friendly Sanitation Design in Rapid-Onset Emergencies

Save the Children UK and Eclipse Experience, a user-centred design agency, will deliver two pilot projects in displacement camps in Bangladesh and Iraq that focus on the design of child-friendly sanitation facilities. The pilots will use interactive surveys and co-creation sessions with children aged 5–12 and their caregivers to generate data and insights that help to deliver more child-friendly latrines. The team will draw on this experience to iterate and develop the methodology, and will publish the results in a summary report to inform best practice.

CHALLENGE WINNER:

Rapid Community Engagement in Uganda

Welt hungerhilfe and Snook will deliver pilot projects in two Ugandan refugee settlements that focus on women and children. The WASH team in Uganda is currently using the community engagement tool, ‘Participatory Hygiene and Sanitation Transformation’ (PHAST), which, though widely applied in the sector, is not appropriate for rapid understanding of affected people’s needs and preferences. Over five months, this project will prototype, test and develop a hybrid PHAST/user-centred design methodology and an associated toolkit focused on rapid-onset refugee crises.

CHALLENGE WINNER:

Rapid Community Engagement in Lebanon

The Qatar Red Crescent and SESRI project focusses on the use of robust quantitative and qualitative research methods to rapidly develop an understanding of community needs and preferences for sanitation. Their methodology comprises: i) Rapid ethnographic survey with a low number of questions – providing a mix of quantitative and qualitative data to get feedback on sanitation preferences and concerns; ii) Co-creation to refine prototype (users, engineers, public health promoters); and iii) Implementation of the prototype, and cycles of iterations. Throughout this process, the team will also draw on user-centred design tools.

WANT TO KNOW MORE ABOUT OUR WASH INITIATIVE AND FUNDED PROJECTS?
Get in touch with Cecilie Hestbaek – c.hestbaek@elrha.org
ACCELERATING THE JOURNEY TO SCALE

CLAIRE DUSONCHET – Innovation Management Adviser
NORA OLESKOG – Innovation Management Adviser

Complex humanitarian challenges require innovative solutions to be delivered, and to be effective, at scale. The HIF’s Accelerating the Journey to Scale initiative helps promising innovations to scale, maximising their potential to improve the lives of emergency-affected people.

The HIF defines ‘scale’ as building on demonstrated successes to ensure solutions reach more people while delivering intended impact, in a financially sustainable way. Scaling innovation in the humanitarian sector, within demanding, complex and often insecure environments, comes with its own particular set of challenges. The HIF is one the first actors to explore these challenges with a dedicated funding initiative.

Three Scale ‘winners’ were selected by the HIF Funding Committee in September 2016: Panzi Foundation, Field Ready and Translators without Borders. Each team was awarded a £400,000 grant supplemented by a two-year support package involving expert mentoring and coaching, tailored to each project.

The advisory support package provided for the grantees draws on the HIF’s experience and learning from its portfolio. Having funded 130 diverse projects over the last seven years, we are well-placed to offer support in areas critical for scale, including innovation management, monitoring and evaluation, partnership development, business model development and effective communication. Furthermore, we’re placing a strong emphasis on generating new learning and evidence for the sector on what works in the journey to scale.

EMERGING LEARNING

What have we learned so far? First, to set the trajectory and keep on learning. We’ve worked with our three funded projects to set their scaling trajectories – to map out the activities and intended results that will allow them to meet their scaling goals. Such trajectories won’t always reflect the activity delivered, but, more important than accuracy, is that this planning process allows an important cycle of learning to occur. For example, did a marketing push deliver what was expected? If not, why not? What else can we do, or do differently?

Second, scaling requires attention to both ‘heart and mind’. It’s vital to offer both a compelling story on why a given innovation is better than the status quo, and to secure rigorous evidence of impact, a tested business model, clarity on cost drivers, and a route to sustainability.

Lastly, routines matter. It is important to keep momentum, to focus on the ‘must haves’ and avoid distractions. We’ve worked with the three scaling projects to establish a routine of shared priority setting and facilitated problem solving. Our newly-developed Progress to Scale Framework has helped us with this.

TRACKING PROGRESS TO SCALE

Assess where the innovations we support are in their scaling journey.
Track their progress throughout the project.
Help inform what support they need to scale.
Create clear actions and next steps.

Although there is not one recipe for scaling, there are recurring elements that need to be in place. These are set out in our Progress to Scale Framework. This tool can help funders and innovators in the humanitarian sector to track an innovation’s capacity for scale, and to understand what support is needed to reach large-scale impact.

The framework allows us to:

PURPOSE
EXECUTION
EVIDENCE
OF IMPACT
SUSTAINABLE
IMPACT AT
SCALE
SCALING
STRATEGY
RESOURCES

Illustration of the Progress to Scale Framework’s five areas of understanding in order for humanitarian innovations to reach sustainable impact at scale.

A working prototype of the tool is available on our website, at www.elrha.org/hif/innovation-resource-hub/progress-scale-framework

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DEVELOPING OUR SUPPORT OFFER

Scale is one of the ‘big questions’ for the humanitarian innovation community. We aim to continuously develop our work in this area, building evidence on effective support, improving our offer and making it available to a larger innovation cohort. However, we can’t do this alone. Collaboration with other actors in the humanitarian innovation ecosystem will be essential to deliver the right forms and the right level of end-to-end support. This will allow the most promising innovations to progressively measure, expand, and maximise their impact.

PROJECT UPDATES

Healing in Harmony: Music Therapy for Vulnerable Communities

‘Healing in Harmony’ aims heal to traumatised survivors of sexual violence through writing, recording and professionally producing songs about their experiences, transforming pain to power. The first phase of the project’s scaling strategy is to refine and develop the methodology to support its replication in different contexts. To this end, they have made significant progress in developing their monitoring and evaluation framework and establishing a rigorous research study to prove the generalisability of the results. Panzi and Make Music Matter have also launched a new programme in Mulamba, and are working to develop partnerships with other organisations to prepare for scale up across DRC.

Making Humanitarian Supplies in the Field

‘Manufacturing Humanitarian Supplies in the Field’ works with local communities to identify product requirements and manufacture critical items at the point of need using local manufacturing and technology such as 3D printers. Field Ready’s projected pathway to scale involves an initial ‘scale up’ investment to increase the number of deployments, and the next phase will ‘scale out’ capabilities by developing distributed manufacturing techniques. To date, Field Ready have developed a rigorous monitoring and evaluation framework, established new country programmes in South Sudan, Jordan and Kenya, and signed an agreement with the Australian Department of Foreign Affairs and Trade (DFAT) to be on stand-by in case of an emergency in the region – a cornerstone of their scaling strategy.

Words of Relief

‘Words of Relief’ aims to enable local communities to better communicate with relief workers, so they can provide and receive information on the challenges they face. Their scaling journey involves developing their platform, developing new and more effective ways of communicating and sharing vital information directly with affected populations, and developing a new business model to ensure the long-term sustainability of its services. A key challenge has been the need to advocate for the importance of people affected by humanitarian crisis receiving the right information in the right way and being able to communicate with aid workers. They have also developed a monitoring, evaluation and learning framework that allows them to effectively measure the impact of their work, and to use data to inform the development of their services and drive decisions about where, why, and how they respond to humanitarian crises.

Want to know more about our scale initiative and funded projects? Get in touch with Claire Dusonchet - c.dusonchet@elrha.org
GETTING CLOSER TO AFFECTED COMMUNITIES

IAN McCLELLAND – Outreach and Engagement Adviser
FRANCES HILL – Partnerships Manager

Elrha has a clear commitment to put emergency-affected people at the forefront of its work, and to create space for collaboration on research and innovation with crisis-affected communities. In 2016-2017 we have begun to explore network approaches to bottom-up innovation through a new strategic partnership with the Asia Disaster Reduction and Response Network (ADRRN).

The role of networks in encouraging innovation is well-established in innovation literature. The phrase ‘open innovation’ was coined by Henry Chesborough at the University of California, Berkeley, to refer to a new model of innovation in the private sector which draws from a wider pool of ideas and stresses dynamic, networked and open approaches. Some of the arguments for pursuing innovation through networks include the ability to:

- Share costs and absorb risks in developing new innovations.
- Share experiences, learn from each other across frontiers, and develop collective insights.
- Spread and diffuse new ideas and technologies.

The HIF-ADRRN partnership represents a vital opportunity to capitalise on the increased alignment of our strategic objectives. Together we aim to increase the efficiency and effectiveness of local response efforts, to make innovation learning, tools and resources more accessible, and to test new approaches to supporting local innovation in the humanitarian sector.

Since the initiation of the partnership in March 2017, the ADRRN Tokyo Innovation Hub (ATIH) has been firmly established, with the recruitment of a Regional Innovation Coordinator and the launch of a new website. In total, over 100 people from 20 organisations across the Asia Pacific region have attended workshops, introducing them to key concepts in humanitarian innovation and opening up access to resources, funding and support.

In May/June 2017, the HIF and ADRRN co-hosted a regional innovation workshop in Indonesia, at which eight teams from across the Asia-Pacific received tailored assistance to develop their projects. Since the workshop, three of these projects have been awarded seed funding from the HIF (see pages 29-30). ADRRN have facilitated further in-house workshops with member organisations in Nepal, Indonesia and Malaysia, and a second jointly-facilitated workshop took place in India in September 2017. Throughout this time, we’ve learned three key lessons:

1. THE NEED FOR A SHARED UNDERSTANDING OF INNOVATION

One of the key lessons learned from the first six months of the partnership is the degree to which international actors lead on and set the discourse on humanitarian innovation. This has largely bypassed national and sub-national NGOs who are unfamiliar with – and potentially alienated by – the language and terminology used. A key focus of our work is to bridge this gap through joint-learning exercises and case study examples.

2. THE NEED FOR GREATER FOCUS ON RESILIENCE

Longer-term ‘resilience thinking’ is a common philosophy among ADRRN members. Working with communities in areas prone to cyclical flooding or other recurrent disasters and ‘living in the context’ requires these national actors to operate on a broader development-humanitarian continuum. In the push for localisation, this broader perspective highlights the need for international humanitarian donors and actors, to be more flexible in their approach to working with national NGOs.

3. THE NEED FOR FUNDING AND ADVOCACY FOR INNOVATION

Local organisations must be given the resources and operational space to develop their own innovative solutions, in order to take on a bigger role within the humanitarian system. Beyond funding, some of the most significant hurdles faced by innovating teams lie within their own organisations, reflecting learning from the HIF-ALNAP research that a ‘culture of innovation’ is a critical factor for success.

Good ideas can come from any sector and any community in the world. We are mistaken if we think we have all the answers ourselves, or if we wait for the people with the best ideas to come to us. We must embrace networks and new partnerships to actively find the locally-created and owned solutions that could make a difference, and ensure their potential is maximised. And we hope to use the bonds of trust, cooperation and community inherent in networks to build an ecosystem for successful innovation from the bottom-up.
**SEED FUNDED PROJECTS**

**DIGITAL PH**

**LEAD ORGANISATION:** NASSA/Caritas Philippines  
**LOCATION:** Philippines  
**GRANT VALUE:** £10,000

**WHAT IS THE HUMANITARIAN NEED?**  
When a disaster occurs, humanitarian agencies frequently carry out independent assessment activities resulting in delays and inefficiencies. And all too often, they fail to sufficiently engage local communities – they do not consider their capacities, and they do not fully understand their needs and vulnerabilities.

**WHAT IS THE INNOVATIVE SOLUTION?**  
The DIGITAL PH project (Digitized Community Disaster Risk Mapping and Information for Efficient Humanitarian Response and Development Programming in the Philippines) builds on a comprehensive mapping of 176 communities during the three-year Haiyan recovery and rehabilitation program, to digitise and make available validated and up-to-date information on community demographics, vulnerabilities and capacities, and other vital information for future response.

**WHAT ARE THE EXPECTED OUTCOMES?**  
The innovation aims to put communities first, by empowering them to maintain this information in an online database, and to use it in the event of an emergency to assess needs, and respond appropriately. The platform will also be opened up to other responders in order to provide real-time data on the number of people affected and their locations, as well as local capacities and appropriate channels for communication.

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**Climate Adaptive Farming in Drought Prone Areas**

**LEAD ORGANISATION:** YAKKUM Emergency Unit (YEU)  
**PARTNERS:** Centre for Agriculture, Fisheries and Forestry  
**LOCATION:** Indonesia  
**GRANT VALUE:** £9,999

**WHAT IS THE HUMANITARIAN NEED?**  
Approximately 90% of the agricultural land in Gunung Kidul District, Yogyakarta Province, Indonesia, is rain-fed dry land with a high dependence on precipitation and irrigated land is very limited. Droughts are a high risk, and these slow-onset disasters have potentially devastating consequences.

**WHAT IS THE INNOVATIVE SOLUTION?**  
YAKKUM Emergency Unit (YEU) works with farmers to encourage climate adaptive farming, which combines the use of organic farming, biological pest control and drought-resistant seeds to reduce the risks of crop failure and attack from pests. This approach blends local wisdom (eg practices, knowledge, seed varieties) with other sources of information (eg forecasting) for optimum results.

**WHAT ARE THE EXPECTED OUTCOMES?**  
This project builds on work carried out in 2016 to produce a local drought-tolerant seed variety. In this phase, the project aims to improve locally-managed production of drought-tolerant seeds, strengthen the capacity of farmers’ groups and local authorities to anticipate the impacts of climate change, and utilise climate information in preparing necessary adaptation actions.

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**Refugee Assets**

**LEAD ORGANISATION:** HOST International  
**PARTNERS:** Refugee Talent  
**LOCATION:** Multiple countries in Asia  
**GRANT VALUE:** £10,000

**WHAT IS THE HUMANITARIAN NEED?**  
Refugees need support to overcome the barriers to employment, and employers need support to access this untapped labour source. The Refugee Assets project aims to concurrently address the refugee crisis and labour shortages in the Asia-Pacific region by linking refugees with employers across the region via an online matching platform, and providing end-to-end support for both the employer and the employee.

**WHAT IS THE INNOVATIVE SOLUTION?**  
As well as developing a custom platform for linking refugee communities to the international job market, the project also aims to forge new partnerships across the region in order to drive disruptive change to restrictive migration policies and to shift the paradigm of international protection strategies for refugees to include skilled migration.

**WHAT ARE THE EXPECTED OUTCOMES?**  
The innovation aims to put communities first, by empowering them to maintain this information in an online database, and to use it in the event of an emergency to assess needs, and respond appropriately. The platform will also be opened up to other responders in order to provide real-time data on the number of people affected and their locations, as well as local capacities and appropriate channels for communication.

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WANT TO KNOW MORE ABOUT OUR CAPACITY BUILDING WORK AND FUNDED PROJECTS?  
Frances Hill - f.hill@elrha.org  
Ian McClelland - i.mcclelland@elrha.org
THE CLICK-MUAC PROJECT

WHAT DID YOUR PROJECT SET OUT TO DO?

Undernutrition accounts for 45% of all global deaths in children under five. It is estimated that, at any one time, over 16 million children suffer from severe acute malnutrition (SAM) globally. Community-based management of acute malnutrition (CMAM) programmes that mobilise communities to ensure regular case detection have been indispensable in scaling-up the treatment of SAM globally. However, there is often an overreliance on community health workers and volunteers to conduct case detection. They are responsible for a number of other health activities, have competing priorities, and require regular training.

A recent approach involves training mothers/caregivers to monitor their children’s nutritional status by measuring mid-upper arm circumference (MUAC) with a MUAC tape. Results have been very encouraging but there is a need to improve the sensitivity of the MUAC tape measurement as misclassification errors have been observed.

Our project aimed to address this by developing simplified, standardised MUAC measurement devices that were easy to use, highly sensitive and required minimal training.

WHAT ARE THE PROBLEMS WITH THE ORIGINAL MUAC TAPE?

There are some design issues with the original MUAC tape, which can cause measurement error. These include:

- The thickness of the tape which produces a systematic error of 1.88mm.
- Measuring points that don’t extend to the edge of the tape.
- A tendency for the tape to wobble when taking the measurement.
- A narrow width which can result in over-tensioning.
- A small tab which reduces the ability to tension the tape properly.

These issues can cause inaccurate results, which may mean a child is not referred for treatment or may be erroneously referred for treatment and be turned away because he/she doesn’t meet admission criteria.

WHY DID YOU DEVELOP THE PROTOTYPES AND NOT JUST IMPROVE THE MUAC TAPE?

An improved MUAC tape had already been developed by MSF. We were using it as a reference device but it turned out to be the best performing device. We then took this improved MUAC tape and simplified it for mothers and caregivers; they were trained to use them to classify the nutritional status of their child. The data from the study indicated that all devices were successful in improving sensitivity; however, the improved MUAC tape performed best and can be produced more cheaply.

The improved MUAC tape includes:

- A corrected measurement scale to remove the systematic error of 1.88mm.
- Measuring points that extend to the edge of the tape.
- A three-slot “buckle” to hold the tape straight while measurements are taken.
- A broader width to reduce the effect of over-tensioning and to increase the probability of the tape covering the mid-point of the upper-arm.
- A large tab to enable controlled tensioning of the tape.

How does your innovation address this?

Through this project we developed three Click-MUAC plastic bracelet prototypes and compared them to an improved MUAC tape – developed by Medicines Sans Frontières (MSF) – in Isiolo County, Kenya.

WHAT HAVE BEEN THE CHALLENGES?

Qualitative community feedback indicated that some mothers/caregivers were deliberately tightening the simplified MUAC tape with the aim of getting their children admitted to the acute malnutrition treatment programme.

In order to resolve this, we carried out refresher trainings during mother support group meetings and household visits. This ensured that mothers/caregivers understood not only how to conduct MUAC measurements but also that measurements are reconfined by staff at the health facility before admission to the treatment programme and therefore any falsified measurements are not accepted.

WHAT HAVE BEEN THE BIGGEST LESSONS LEARNED?

We know that:

1. Mothers/caregivers can successfully assess the nutritional status of their children with minimal training.
2. The Click-MUAC prototypes and improved MUAC tape were all successful in assessing the nutritional status of children accurately, but the tape performed best – this may be due to mothers/caregivers’ concerns that the bracelets would pinch their child’s skin or a result of the specific design features of the improved MUAC tape which helped to increase its sensitivity.

There must be increased sensitisation of mothers/caregivers on the admission/verification process at the health facility to ensure they do not seek treatment for children who are not suffering from SAM or MAM.

WHAT ARE THE PLANS FOR SCALING-UP?

The improved, simplified MUAC tape and the mother-MUAC approach is already gaining momentum in Kenya, as an approach that can be integrated into the CMAM surge model. However, UNICEF buy in is essential. UNICEF is the biggest buyer of MUAC tapes and it will be vital that they incorporate the design modifications to their existing MUAC tapes in order to scale-up successfully.

Creating contextualised training packages and a clear, costed scale-up plan for different contexts is necessary to help scale-up the approach globally.

Also continued research into this approach in the future will be vital, to demonstrate its impact on treatment coverage and its ability to prevent malnutrition through regular screening. This in turn will help to promote the approach as a preventative, life-saving intervention.

*sensitivity is the smallest amount of data that you can consistently and accurately diagnose in a sample. (In this project sensitivity is defined by the ability of a device to correctly detect children with the condition (SAM or MAM)) as opposed to specificity which defined as the ability of a device to correctly detect children without the condition (SAM or MAM).
HIF BOARD
The following members were active during the 2017 reporting period.

MAGDALENA BANASIAK
Senior Innovation Adviser, UK Department for International Development
Magdalena Banasiak has over 20 years’ experience in international development working in Africa, Asia and the Middle East, including work in post-conflict environments. Currently she is leading on innovation and social-entrepreneurship in international development and humanitarian. She leads on strategic partnerships with the private sector on mobile for development and humanitarian, as well as market building for energy service provision, and water and sanitation.

JOHN BESSANT
Professor of Innovation and Entrepreneurship, University of Exeter
Originally a chemical engineer, Professor John Bessant has been active in research, teaching and consultancy in technology and innovation management for over 25 years. He currently holds the Chair in Innovation and Entrepreneurship at Exeter University.

ANAB JAIN
Director and co-founder, Superflux and IoTACADEMY
Anab Jain is a designer, filmmaker and co-founder of Superflux, a foresight, design and technology innovation company. She is also the co-founder of the Internet of Things Academy (IoTAcademy), a civic innovation and advocacy platform, and was recently appointed Professor of Industrial Design at the University of Applied Arts in Vienna. Anab’s work has won numerous awards and has been exhibited around the world.

ANDREW CLAYTON
Social Development Adviser, Research and Evidence Division, UK Department for International Development
Andrew Clayton is a social development adviser working on agriculture, climate and the environment. He provides specialist social development advice on a wide portfolio of research and innovation programmes and also oversees the management of a number of funded programmes, including the HIF. He has wide experience of managing humanitarian operations in Africa and Asia, both with DFID and NGOs.

JIM MALTBY
Senior Strategic Analyst, Defence Science and Technology Laboratory, Ministry of Defence
Jim Maltby provides long-term planning, science and technology insights, and strategy and policy advice to senior decision-makers in national security. His interests are in future changes in society and how this could be driven by adoption of technology from a socio-technical systems perspective. He is currently a RSA Fellow and a Fellow of the Institute of Civil Protection and Emergency Management (ICPEM).

SAMIR K DOSHI
Senior Scientist, Global Development Lab, US Agency for International Development
Samir Doshi leads programming on data for decision making, adaptive management and research on digital development for USAID. Samir has held teaching and research appointments at the University of Cambridge, the Stockholm Resilience Centre, Queen’s University and the University of Vermont.

ROBIN E MAYS
Research Fellow, Department of Human-Centered Design and Engineering, University of Washington
Robin Mays has over 18 years’ professional experience planning and conducting rapid response operations and logistics. As a researcher her work revolves around understanding contextualised and dynamic meanings of value and effectiveness within humanitarian work, the role of decision-making, and implications for the design and accountability of humanitarian technology.

BEN RAMALINGAM
Leader, Digital & Technology Research Group, Institute of Development Studies
Ben Ramalingam is a freelance consultant and writer specialising in international development and humanitarian issues. He is the author of ‘Aid on the Edge of Chaos: Rethinking International Cooperation in a Complex World’, which was published in January 2014. Ben currently holds the honorary position of Senior Research Associate at both the London School of Economics and the Overseas Development Institute, and he is a Visiting Fellow at the Institute of Development Studies, Sussex University.

KRISTIN B SANDVIK
Research professor in humanitarian studies, PRIO, Professor, Department of Criminology and Sociology of Law, University of Oslo, S J D Harvard Law School
Kristin Sandvik is a socio-legal scholar with a particular interest in the politics of innovation and technology in the humanitarian space. Her doctoral work analysed UNHCR’s refugee resettlement practices in Uganda. Sandvik’s current research covers IDP-organisations in Colombia, gender-based violence, humanitarian technology and innovation (cash, cyber, drones, robots) and humanitarian ethics and experimentation.

NIGEL SNOAD
Product Manager – Verily Alphabet
Nigel Snoad is currently helping fight mosquito borne disease through Alphabet’s Debug Project. He was previously the product lead for Google’s Civic Innovation, Elections and Crisis Response initiatives, providing information and tools to help people make better decisions and collaborate during emergencies. Before joining Google in 2011, Nigel led research and development on humanitarian systems at Microsoft, working on crisis solutions and responses in Afghanistan, Haiti and elsewhere.

DAN MCCCLURE
Innovation Design Practice Lead, ThoughtWorks
Dan McClure has spent 30 years designing and applying innovation practices in both private and public organisations. As a pragmatic hands-on practitioner, he has confronted challenges at all stages of the innovation lifecycle, from initial scrappy entrepreneurship to driving cross-cutting change in global enterprises. He has worked with a range of humanitarian and public good organisations on advancing their use of innovation.

MARTIN HARRISON
Chair, Elrha
Martin Harrison is a freelance consultant specialising in the development of humanitarian technology, innovation and strategy. He has 35 years’ experience in humanitarian technology from his time in senior roles at the Ministry of Defence in the UK and with USAID. He is currently a trustee at the Humanitarian Innovation Fund.

Meg Sattler
Senior Innovations Specialist, Communication and Community Engagement, Start Network/CDAC Network
Prior to her current role Meg Sattler was Global Advisor for Community Engagement with the Emergency Telecommunications Cluster at the World Food Programme. Meg has held senior humanitarian roles across non-governmental and UN organisations in Haiti, Pakistan and throughout the Middle East. She has postgraduate degrees in Humanitarian Management and Journalism and her writing and photography are used by various organisations and academic institutes.
The following members were active during the 2017 reporting period.

**HIF FUNDING COMMITTEE**

Mary Atkinson, Coordinator, Food Research Collaboration, City University London
Keith Chibafa, Service Delivery Specialist, World Food Programme
Andrew Collins, Professor in Disaster and Development, Department of Geography and Environmental Sciences, Northumbria University
Sanjana Hattotuwa, Special Advisor, ICT4Peace Foundation
Shaun Hazedine, Head of Innovation and Futures/Foresight, International Federation of Red Cross and Red Crescent Societies

**WASH TECHNICAL WORKING GROUP**

Andy Bastable (Chair), Head of Water and Sanitation, Oxfam
Richard Bauer, Senior WASH Adviser, Norwegian Refugee Council
Nicholas Brooks, Emergency WASH Team Leader, CARE International
Murray Burt, Global Senior WASH Officer, UNHCR
Willam Carter, Senior Officer (WatSan/CH), IFRC and Red Crescent Societies
Brian Clarke, Senior Visiting Fellow, Centre for Environmental Health, Engineering, University of Surrey
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Claudio Deola, Senior Humanitarian WASH Adviser, London School of Hygiene and Tropical Medicine
Dominique Porteaud, Cluster Coordinator, UNICEF

The following members were active during the 2017 reporting period.

Howard Rush, Professor, Centre for Research in Innovation Management (CENTRIM), University of Brighton
David Sanderson, Professor and Inaugural Judith Nelson Chair in Architecture, University of New South Wales
Romola Sanji, Assistant Professor, Department of Geography and Environment, London School of Economics and Political Science
Iain Stewart, Director Risk Consulting, G4S
Laura Walker McDonald, Independent Consultant

**GBV ADVISORY GROUP**

April Pham, Senior Gender Capacity Advisor (GenCap), InterAgency Standing Committee based at UNHCR
Daniele Spencer, Independent
Elizabeth Caffery, Gender Adviser, World Humanitarian Summit
Sandee Pyne, Chief Executive Officer, Community Partners International (CPI)

The following members were active during the 2017 reporting period.

**OUR DONORS**

The HIF has a strong, multi-donor funding base and has been supported by four committed donors with particular areas of interest and expertise, during this reporting period. These four donors supported our external Evaluation and strategic review in late 2017 and will continue to support our new strategic direction.

- The UK Government (DFID), our longest-standing donor, has provided support to our core grants facility and WASH initiative since 2010. They also funded our Evaluation, a robust external review of the programme’s performance to date, which informs our new strategic direction from 2018.

- The European Civil Protection and Humanitarian Aid department (ECHO) has supported us since January 2017, to enhance innovation capacity and capability in the humanitarian sector. To enable this, ECHO is funding innovation through our core grants, workshops, webinars, and a first-ever ‘field guide’ for humanitarian innovation.

- The Netherlands Ministry of Foreign Affairs (MFA) has supported our Accelerating the Journey to Scale initiative since 2016. Through this initiative, three promising innovations are provided with scale grants and a tailored support and advice package over a two-year period. The MFA is also funding an exploration of ‘what works’ in terms of supporting scale in humanitarian contexts.

- The Swedish International Development Cooperation Agency (Sida) is another long-standing donor, supporting the HIF since 2015 on our Gender-based Violence initiative. Sida has committed to providing core support to us once again from 2018 onwards.
HIF COMMUNICATIONS

MAILING LIST SUBSCRIBERS

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TWITTER FOLLOWERS

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WEBSITE VISITORS

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SPOTLIGHT ON HIF

HOW TO SAVE A YOUNG MOTHER’S LIFE WITH A CONDOM

How a condom, a catheter, and a syringe could stop women dying during childbirth. BBC World Hacks featured former grantee, Massachusetts General Hospital and their Utrine Balloon Tamponade project. (July 2017)

TWO PATHS TO SUPPORT GRASSROOTS INNOVATION

Features grantee International Federation of Red Cross and Red Crescent Societies (IFRC) and their work in Indonesia trialling two distinct methods to foster innovation within the communities they aim to help. (July 2017)

MEET THE GLOBAL CITIZEN OF CANADA WHO HELPS TRAUMA SURVIVORS ONE SONG AT A TIME

Profiles Darcy Ataman from Make Music Matter, a project partner funded through our Journey to Scale initiative, working on Healing in Harmony in the DRC. (October 2017)